

## INTERNATIONAL SEARCH REPORT

PCT/IB 03/03271

|   |  |  |
|---|--|--|
| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC 7 B23K26/14 C03B33/09 C03B33/095  |  |  |
| According to International Patent Classification (IPC) or to both national classification and IPC   |  |  |
| <b>B. FIELDS SEARCHED</b><br>Minimum documentation searched (classification system followed by classification symbols)<br>IPC 7 B23K C03B   |  |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched   |  |  |
| Electronic data base consulted during the International search (name of data base and, where practical, search terms used)<br>WPI Data, PAJ, EPO-Internal   |  |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>   |  |  |
| Category *  | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No.  |
| P,X   | US 2003/052098 A1 (CHOO DAE-HO ET AL)<br>20 March 2003 (2003-03-20)<br>paragraph '0051! - paragraph '0053!<br>paragraph '0056!<br>paragraph '0068!<br>paragraph '0072! - paragraph '0077!;<br>claims 1,9,12; figures 4,5 | 1,10   |
| A   | US 6 252 197 B1 (KAR ARAVINDA ET AL)<br>26 June 2001 (2001-06-26)<br>cited in the application<br>the whole document  | 1,10   |
| A   | US 6 350 123 B1 (KIMMEL ANDREW I ET AL)<br>26 February 2002 (2002-02-26)<br>the whole document   | 1,2,10   |
| <input type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.  |  |  |
| <b>* Special categories of cited documents:</b><br>"A" document defining the general state of the art which is not considered to be of particular relevance<br>"E" earlier document but published on or after the International filing date<br>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)<br>"O" document referring to an oral disclosure, use, exhibition or other means<br>"P" document published prior to the International filing date but later than the priority date claimed<br>"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention<br>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone<br>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.<br>"&" document member of the same patent family |  |  |
| Date of the actual completion of the International search<br>10 November 2003   |  | Date of mailing of the international search report<br>25/11/2003 |
| Name and mailing address of the ISA<br>European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016  |  | Authorized officer<br>Aran, D                                    |

## INTERNATIONAL SEARCH REPORT

PCT/IB 03/03271

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s)   | Publication<br>date  |
|---|---------------------|--|--|
| US 2003052098 A1                          | 20-03-2003          | KR 2002089711 A<br>JP 2002346995 A   | 30-11-2002<br>04-12-2002   |
| US 6252197 B1                             | 26-06-2001          | US 6259058 B1<br>US 6211488 B1<br>US 6420678 B1  | 10-07-2001<br>03-04-2001<br>16-07-2002   |
| US 6350123 B1                             | 26-02-2002          | US 5741247 A<br>US 5785521 A<br>US 6567582 B1<br>US 6561803 B1<br>US 6254597 B1<br>US 6231567 B1<br>AU 7011796 A<br>EP 0847319 A2<br>JP 11511386 T<br>WO 9707928 A2<br>US 6610053 B1 | 21-04-1998<br>28-07-1998<br>20-05-2003<br>13-05-2003<br>03-07-2001<br>15-05-2001<br>19-03-1997<br>17-06-1998<br>05-10-1999<br>06-03-1997<br>26-08-2003 |